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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,907	12/12/2003	Richard J. Roesgen	1759.144	2303

23405 7590 05/24/2004

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ALBANY, NY 12203

EXAMINER

HUNTER, ALVIN A

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/734,907	Applicant(s) ROESGEN ET AL.	
	Examiner Alvin A. Hunter	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/12/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on June 25, 2001. It is noted, however, that applicant has not filed a certified copy of the French application as required by 35 U.S.C. 119(b).

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 5 recites "zirconia" wherein the specification on page 5, line 4, recites "zirconium dioxide".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 5 recites an improper Markush grouping. Markush grouping cannot include the term "comprising" and the phrase "a combination of preceding materials."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins (USPN 5855524) in view of Chang (USPN 6402636).

Jenkins discloses a golf clubhead 12 having a striking face 20 which has a loft angle of 0 to 65°, wherein the striking face 20 has a plurality of grooves (See Summary of the Invention and Figure 1). It is inherent within Jenkins that the striking has a surface roughness, but Jenkins does not disclose the surface roughness or the hardness of the striking face. Chang discloses a metal golf club having a striking face with a surface roughness of less than about 25 microinches, or 0.635 micrometers and a Rockwell C hardness of 45 to 65, equivalent to roughly about 459 to 902 Vickers or at least 14 GPa (See Column 5, lines 11 through 53). One having ordinary skill in the art would have found it obvious to have a surface roughness of less than 0.25 micrometers and a Vickers hardness of greater than 5, as taught by Chang, in order to reduce the spin imparted to a golf ball struck by the club head.

In regard to claim 2, Chang discloses the surface roughness of the striking face being less than 25 microinches, or 0.935 micrometers (See above regarding claim 1).

In regards to claim 3, Chang discloses the strike face made of tempered steel (See column 5, lines 30 through 53). The applicant defines marginal steel as being as steel tempered in the martensitic state; therefore, it is submitted that Chang discloses the strike face made of marginal steel.

In regards to claim 6, Chang discloses the surface roughness of the striking face being less than 25 microinches, or 0.935 micrometers (See above regarding claim 1).

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5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins (USPN 5855524) in view of Chang (USPN 6402636) further in view of Inamori (USPN 3975023).

Jenkins in view of Chang does not disclose the striking face made of a ceramic. Inamori discloses a club head having a ceramic striking face 1 (See Abstract). One having ordinary skill in the art would have found it obvious to have the striking face made of a ceramic, as taught by Inamori, in order to increase the flight distance of the golf ball.

In regards to claim 5, Inamori discloses the ceramic being alumina (See Column 2, lines 38 through 45).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins (USPN 5855524) in view of Chang (USPN 6402636) further in view of Nagai et al. (USPN 5190289).

Nagai et al. teaches a head and shaft having the surface roughness decrease along the height (See Column 15, lines 58 through 66). Though Nagai et al. does not teach the striking face, it teaches the concept of having the surface roughness decreasing along the height. One having ordinary skill in the art would have found it obvious to having the surface roughness of the striking face decrease along its height, as taught by Nagai et al., in order to reduce air resistance to the golf club.

7. Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (USPN 6402636) in view of Jenkins (USPN 5855524).

Chang discloses a metal golf club having a striking face with a surface roughness of less than about 25 microinches, or 0.635 micrometers and a Rockwell C hardness of 45 to 65, equivalent to about 459 to 902 Vickers or at least 14 GPa (See Column 5, lines 11 through 53). Chang does not disclose having a loft angle of at least 45%. Jenkins discloses a golf clubhead 12 having a striking face 20 which has a loft angle of 0 to 65°, wherein the striking face 20 has a plurality of grooves (See Summary of the Invention and Figure 1). One having ordinary skill in the art would have found it obvious to have the loft angle of Chang be greater than 45, as taught by Jenson, in order to reduce the spin imparted to a golf ball struck by the club head.

In regard to claim 2, Chang discloses the surface roughness of the striking face being less than 25 microinches, or 0.935 micrometers (See above regarding claim 1).

In regards to claim 3, Chang discloses the strike face made of tempered steel (See column 5, lines 30 through 53). The applicant defines marginal steel as being as steel tempered in the martensitic state; therefore, it is submitted that Chang discloses the strike face made of marginal steel.

In regards to claim 6, Chang discloses the surface roughness of the striking face being less than 25 microinches, or 0.935 micrometers (See above regarding claim 1).

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (USPN 6402636) in view of Jenkins (USPN 5855524) further in view of Inamori (USPN 3975023).

Chang in view of Jenkins does not disclose the striking face made of a ceramic.

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Inamori discloses a club head having a ceramic striking face 1 (See Abstract). One having ordinary skill in the art would have found it obvious to have the striking face Chang in view of Jenkins made of a ceramic, as taught by Inamori, in order to increase the flight distance of the golf ball.

In regards to claim 5, Inamori discloses the ceramic being alumina (See Column 2, lines 38 through 45).

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (USPN 6402636) in view of Jenkins (USPN 5855524) further in view of Nagai et al. (USPN 5190289).

Chang in view of Jenkins does not disclose the surface roughness decreasing along the height of the striking face. Nagai et al. teaches a head and shaft having the surface roughness decrease along the height (See Column 15, lines 58 through 66). Though Nagai et al. does not teach the striking face, it teaches the concept of having the surface roughness decreasing along the height. One having ordinary skill in the art would have found it obvious to having the surface roughness of the striking face of Chang in view of Jenkins decrease along its height, as taught by Nagai et al., in order to reduce air resistance to the golf club.

Conclusion

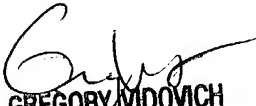
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-5693. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Vidovich, can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAH

Alvin A. Hunter, Jr.


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